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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,408	09/14/2005	Junbiao Zhang	PU030081	1829

24498 7590 01/11/2008

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EXAMINER	
ZIA, SYED	

ART UNIT	PAPER NUMBER
2131	

MAIL DATE	DELIVERY MODE
01/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/549,408	ZHANG ET AL.	
	Examiner	Art Unit	
	Syed Zia	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to application filed on September 14, 2005. Original application contained Claims 1-24. Therefore, Claims 1-24 are pending for further consideration.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Jansen et al. (EP 1178644 A2).

1. Regarding Claim 1 Stenman teach and describe a method for providing a secure communications session with a user terminal in a communications network (Fig.3-5), the method comprising the steps of: transmitting first and second secure keys to the user terminal using a secure communications method, the first and second secure keys being suitable for storage in the user terminal for use during the secure communications session; encrypting and transmitting data to the user terminal using a current session key, and receiving and decrypting data received from the user terminal using the current session key, the first secure key initially being used as the

current session key; and periodically generating by an access point a subsequent session key using the second secure key and using the subsequent session key as the current session key during subsequent communications between the communications network and the user terminal (col.5 line 44 to col.8 line 48).

2. Regarding Claim 4 Stenman teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network, the method comprising the steps of: transmitting first and second secure keys to the mobile terminal using a secure communications method, the first and second secure keys being suitable for storage in tile mobile terminal for use during the secure communications session; encrypting and transmitting data to the mobile terminal using a current session key, and receiving and decrypting data received from the mobile terminal using the current session key, the first secure key initially being used as the current session key; and periodically generating a subsequent session key using the second secure key and using the subsequent session key as the current session key during subsequent communications with the mobile terminal (col.5 line 44 to col.8 line 48).

3. Regarding Claim 7 Stenman teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network, the method comprising the steps of: generating a secure key; transmitting the secure key to the mobile terminal using a secure communications method, the secure key being stored in the mobile terminal for use during the secure communications session; encrypting and transmitting data to the mobile terminal using a current session key, and receiving and decrypting data received from

the mobile terminal using the current session key; and ending the secure communications session by an access point in response to receiving a logoff message from the mobile terminal, the logoff message being in encrypted form and including the secure key (col.5 line 44 to col.8 line 48).

4. Regarding Claim 8 Stenman teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network the method comprising the steps of: generating first and second secure keys; transmitting the first and second secure keys to the WLAN using a secure communications method, the first and second secure keys being stored in the WLAN or use during the secure communications session; encrypting and transmitting data to the WLAN using a current session key, and receiving and decrypting data received from the WLAN using the current session key, the first secure key initially being used as the current session key; and periodically generating by the mobile terminal a subsequent session key using the second secure key and using the subsequent session key as the current session key during subsequent communications with the WLAN (col.5 line 44 to col.8 line 48).

5. Regarding Claim 11 Stenman teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network (WLAN), the method comprising the steps of: generating a secure key; transmitting the secure key to the WLAN using a secure communications method, the secure key being stored in the WLAN for use during the secure communications session; encrypting and transmitting data to the WLAN using a current session key, and receiving and decrypting data received from the WLAN using the current session key; and ending the secure communications session in response to receiving a

logoff message from the WLAN, the logoff message being in encrypted form and including the secure key(col.5 line 44 to col.8 line 48).

6. Regarding Claim 12 Stenman teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network, the method comprising the steps of: installing at least two shared secrets on both the mobile terminal and the WLAN access point during the user- authentication phase whereby a first secret is the initial session key and a second secret is utilized as secure seed to generate subsequent session keys (col.5 line 44 to col.8 line 48).

7. Regarding Claim 18 Stenman teach and describe a method for providing a secure communications session between a mobile terminal and a wireless local access network, the method comprising the steps of: a mobile terminal sending during session logoff an encrypted logoff request accompanied by the secure seed such that the secure seed appears in the logoff request (col.5 line 44 to col.8 line 48).

8. Regarding Claim 19 Stenman teach and describe an access point for providing a secure communications session between a mobile terminal and a wireless local access network, comprising: a means for transmitting first and second secure keys to the mobile terminal using a secure communications method and a means to encrypt data using the first secure .key and a means to periodically generate a subsequent session key using the second secure key (col.5 line 44 to col.8 line 48).

9. Regarding Claim 20 Stenman teach and describe a terminal device for providing a secure communications session with a communications network, comprising:
a means to receive a secure key and a secure seed and a means to store the secure key and the secure seed for use during the secure communications session; a means to receive data and a means to decrypt the data using a current session key during the secure communications session, the secure key being using initially as the current session key; and a means to generate a subsequent session key using the current session key and the secure seed, the subsequent session key thereafter being used as the current session key for subsequent communications (col.5 line 44 to col.8 line 48).

10. Regarding Claim 24, Stenman teach and describe an access point for providing a secure communications session between a mobile terminal and a wireless local area network, comprising: a means to transmit a secure key and a secure seed and a means to store the secure key and the secure seed for use during the secure communications session;
a means to encrypt data and a means to transmit data to the mobile terminal and a means to receive data and a means to decrypt the data from the mobile terminal using a current session key during the secure communications session, the secure key being using initially as the current session key; and a means to generate a subsequent session key using the current session key and the secure seed, the subsequent session key thereafter being used as the current session key for subsequent communications (col.5 line 44 to col.8 line 48)

10. Claims 2-3, 5-6, 9-10, 13-7, and 21-23 are rejected applied as above rejecting Claims 1, 4, 8, 12, and 20. Furthermore, Stenman teach and describe a method for providing a secure communications session between a mobile terminal and a wireless local access network, wherein:

- logging off the user terminal in response to an encrypted logoff request from the user terminal accompanied by the second secure key, and periodically generating step comprises generating the subsequent session key by concatenating the current session key with the second secure key and applying a hash algorithm (col.5 line 17 to col.6 line 41).

the periodically generating step comprises generating a subsequent session key: by concatenating the new key and the second secure key and running a hash algorithm to generate the subsequent session key, and by using a combination of a new key and the second secure key, the new key being generated using the first secure key (col.5 line 17 to col.6 line 41).

the periodically generating step comprises generating a subsequent session key by concatenating the new key and the second secure key and running a hash algorithm to generate the subsequent session key (col.5 line 17 to col.6line 41).

the step of generating a new key and encrypting the new key with the current session key and exchanging and the new key between the WLAN and the mobile terminal key (col.5 line 17 to col.6line 41).

the step of the WLAN and the mobile terminal generating a new session key employing the new session key and the secure seed, generating the new session key generation comprises the step of concatenating the said new key to the secure seed, the step of generating a new session key by applying a hash algorithm on said concatenated result, and the step of using the

said new session key in communication between the WLAN and mobile terminal key (col.5 line 17 to col.6 line 41).

the terminal device comprises a mobile terminal and the communications network comprises a wireless local area network (Fig.1, 5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sz
January 6, 2008

SYED A. ZIA 01/06/2008
PRIMARY EXAMINER